AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A system for measuring at least one physical feature of an animal, comprising:

a light source at least partially backlighting a first portion of the animal, wherein the animal is substantially stationary while being measured;

a first ultrasound transducer arranged substantially vertical to the animal to determine an approximate height of a second portion of the animal; and

an optical device opposing the light source and obtaining an image that includes a silhouette of the first portion of the animal.

2. (Original) The system of claim 1, further comprising a housing unit having at least one sidewall with the light source or optical device mounted thereon.

3. (Original) The system of claim 2, further comprising at least one entry port formed at an end of the unit.

4. (Original) The system of claim 2, further comprising a device arranged adjacent the head of the animal for positioning the animal within the housing unit.

5. (Original) The system of claim 1, wherein the light source comprises a plurality of light emitting diodes arranged in an array.

6. (Original) The system of claim 5, wherein the plurality of light emitting diodes are monochromatic.

7. (Original) The system of claim 1, wherein the first portion of the animal includes at least one leg of the animal, and wherein the image includes at least one silhouette of at least a portion of the at least one leg.

8. (Original) The system of claim 1, wherein the optical device is selected from the group consisting of a photographic camera, a charged-coupled-device, a photodiode array, a CMOS optical sensor, a digital camera, a single dimension video camera, and a 2-dimensional video camera.

9. (Original) The system of claim 8, wherein the optical device comprises a lens for limiting the field of view.

10. (Original) The system of claim 1, further comprising a processor coupled to the optical device for analyzing the image.

11. (Original) The system of claim 10, wherein the processor determines a measurement of the physical feature from the image.

12. (Original) The system of claim 11, wherein the measurement includes a width of a leg, a separation between a pair of legs, a skeletal trunk length of the animal, a pelvic height of the animal, a pelvic width of the animal, a center of the animal, or a volume of the animal.

13. (Original) The system of claim 10, wherein the processor comprises a computer having software and data storage.

14. (Original) The system of claim 10, wherein the processor selects an area on the animal to apply a medical product or to determine subcutaneous fat with an ultrasound transducer.

15. (Cancelled)

16. (Previously presented) The system of claim 1, wherein the second portion of the animal includes the pelvic region of the animal.

17. (Original) The system of claim 1, further comprising a second ultrasound transducer arranged substantially lateral to the animal to determine an approximate width of a third portion of the animal.

18. (Original) The system of claim 17, wherein the third portion of the animal includes the pelvic region of the animal.

19. (Original) The system of claim 17, further comprising a third ultrasound transducer arranged substantially opposing the second ultrasound transducer.

20. (Currently amended) A system for measuring an animal having legs, comprising:

means for obtaining an image of at least a portion of one or more legs of the animal, wherein the animal is substantially stationary while being measured;

means for determining an approximate height of a portion of the animal; and

means for determining at least one approximate physical dimension of the animal from the image.

21. (Original) The system of claim 20, wherein the means for obtaining the image comprises means for at least partially backlighting the at least one leg of the animal.

22. (Original) The system of claim 20, wherein the means for obtaining the image comprises means for capturing one or more silhouettes of the one or more legs of the animal.

23. (Original) The system of claim 20, wherein the physical dimension includes a width of a leg, a separation between a pair of legs, a skeletal trunk length of the animal, a pelvic height of the animal, a pelvic width of the animal, a center of the animal, or a volume of the animal.

24. (Original) The system of claim 20, wherein the means for determining the at least one approximate physical dimension comprises means for determining an approximate distance between at least one pair of legs in the image.

25. (Original) The system of claim 20, wherein the means for determining the at least one approximate physical dimension comprises means for determining an approximate width of at least one leg of the animal in the image.

26. (Original) The system of claim 20, wherein the means for determining the at least one approximate physical dimension comprises means for determining an approximate skeletal trunk length of the animal from at least two pairs of legs in the image.

27. (Original) The system of claim 26, wherein the means for determining the approximate skeletal trunk length of the animal comprises:

means for determining first and second midpoints respectively between first pair and second pairs of legs in the image; and

means for determining an approximate distance between the first and second midpoints.

28. (Original) The system of claim 27, further comprising means for scaling the approximate distance between the first and second midpoints to approximate the skeletal trunk length of the animal.

29. (Cancelled)

30. (Previously presented) The system of claim 20, wherein the means for determining the approximate height comprises means for measuring an approximate distance from an ultrasound transducer to the portion of the animal.

31. (Original) The system of claim 20, further comprising means for determining an approximate width of a second portion of the animal.

32. (Original) The system of claim 31, wherein the means for determining the approximate width comprises means for respectively measuring approximate distances from a pair of substantially opposing ultrasound transducers to the second portion of the animal.

33. (Original) The system of claim 20, further comprising means for selecting an area on the animal to apply a medical product or to determine subcutaneous fat with an ultrasound transducer.

34 – 46 (Cancelled)